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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/070,379	03/06/2002	Takashi Shimada	Q68419	2812

7590 06/19/2003

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2100 Pennsylvania Avenue NW
Washington, DC 20037-3213

EXAMINER

SAINT SURIN, JACQUES M

ART UNIT PAPER NUMBER

2856

DATE MAILED: 06/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n N .

10/070,379

Applicant(s)

SHIMADA ET AL.

Examiner

Jacques M Saint-Surin

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-- The MAILING DATE of this communication appears on th cover sheet with th correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 March 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14 and 25-27 is/are rejected.
- 7) ☒ Claim(s) 15-24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 14, 17 and 25-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Matsuzaki (JP3-92758).

Regarding claim 14, Matsuzaki ('758) discloses a structure inspection apparatus (product inspection) comprising:

a vibration unit (strike of probe 5a) for generating an elastic wave (elastic force of a coil spring 11) in a measuring object (product 2) of a concrete structure (striking device 5);

a vibration detector (microphone 18a) adapted to be placed in contact with a surface of said measuring object (2) for detecting a component in a predetermined frequency range of an elastic vibration generated on the surface of said measuring object by said vibration unit (the sound pressure is transduced into a voltage and the signal is inputted to a computer 22, the presence or absence of the internal defects in the product is judged based on the waveform state of the sound pressure level, see:

Abstract and Fig. 1) ; and

a display device for displaying a maximum amplitude of an output signal of said vibration detector (the voltage voltage is inputted into a noise level meter 18 and displayed, see: Abstract and Fig. 1).

Regarding claim 17, Matsuzaki discloses a striking tool 7 is made to agree with the specified position of the product 2, a current is instantaneously conducted through the electromagnet of the device 5, and attracting force is made to act on the striking tool 7 and the strike of a probe 5a is imparted to the product 2 by elastic force of a coil spring 11, see: abstract and Fig. 1.

Regarding claim 26, it is a method claim that recites the steps for performing the functions of the apparatus of claim 1. Therefore, it is rejected for the reasons set forth for that claim.

Regarding claims 25 and 27, Mazsuzaki discloses a predetermined frequency range of said elastic vibration which is inherently several kHz or less.

Allowable Subject Matter

3. Claims 15-16 and 18-24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lysen (US Patent 6,553,837) discloses a process and apparatus device for analysis of roller bearings in machines.

Passarelli, Jr. (US Patent 5,808,202) discloses electromagnetic acoustic transducer flaw detection apparatus.

Yamanaka (US Patent B1 5,503,010) discloses directional atomic force microscope and method of observing a sample with the microscope.

Orita et al. (US Patent 5,880,351) discloses vibration sensing element and vibration sensor.

Warner (US Patent 3,580,056) discloses nondestructive resonant testing apparatus with magnetic pickup.

Sessler et al. (US Patent 3,867,836) discloses crack detection apparatus and method.

Gutierrez et al. (US Patent 4,163,393) discloses void detector system.

Affeldt, Jr. et al. (US Patent 5,152,401) discloses agricultural commodity condition measurement.

Hwang (US Patent 4,679,033) discloses structure of vibration sensor.

Anderson (US Patent 4,185,180) discloses vibration sensing device.

Anderson, II et al. (US Patent 4,479,389) discloses tuned vibration detector.

Locker (US Patent 6,298,729) discloses catalytic converter testing.


5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacques M Saint-Surin whose telephone number is (703) 308-3698. The examiner can normally be reached on Monday-Friday.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (703) 305-4705. The fax phone

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numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308 0956.


Jacques M. Saint-Surin
June 13, 2003


HEZRON WILLIAMS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800